



1/1 JAPIO - (C) JPO & Japio

PN - ***JP9206559*** A 970812

AP - JP1799196 960202

TI - CONTACT REDUCING METHOD OF NITROGEN OXIDES

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PAC - JP

- JP

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AB - PROBLEM TO BE SOLVED: To obtain a contact reducing method of nitrogen oxides by using hydrocarbons as a reducing agent and to provide a contact reducing method of nitrogen oxides by which nitrogen oxides in exhaust gas can be stably and efficiently reduced by a contact method without using a large amt. of a reducing agent even in the presence of oxygen, sulfur oxides and water content. (19)(11)

- SOLUTION: In the contact reducing method of nitrogen oxides contained in exhaust gas by using hydrocarbons as a reducing agent in the presence of a catalyst, an oxidation catalyst for nitrogen oxides is brought into contact with exhaust gas in a first stage to oxidize nitrogen monoxide (NO) in the exhaust gas into nitrogen dioxide (NO₂). Then in a second stage, hydrocarbons are added to the exhaust gas and the mixture is brought into contact with a reducing catalyst for nitrogen oxides selected from silver, silver oxide and silver aluminate to reduce nitrogen oxides into nitrogen.



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Reduction of nitrogen oxide(s) - where the waste gas is contacted with oxidising catalyst and after adding hydrocarbon to the waste gas, it is contacted with reducing catalyst selected from Silver@, Silver oxide and silver aluminate to reduce

Patent Family:

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Abstract (Basic): JP 9206559 A

In the reduction of NO_x in waste gas in the presence of catalyst using hydrocarbon as the reducing agent, the waste gas is contacted with NO oxidizing catalyst to oxidise NO to NO₂ and after adding hydrocarbon to the waste gas, it is contacted with NO₂ reducing catalyst selected from Ag, Ag₂O and silver aluminate to reduce NO₂ to N₂.

ADVANTAGE - NO_x in waste gas is stably and effectively reduced without using a large quantity of reducing agent even in the presence of O₂, sulphur oxide(s) and water.

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